

CLAIMS

1. A DNA fragment consisting of an open reading frame, which DNA fragment is derived from the genomic DNA of HPV-33 and selected from the group of fragments extending between the nucleotide extremities defined hereafter in relation to the nucleotide-numbering in figs. 1a and 1b respectively :

76 - 556
 543 - 864
 867 - 2811
 2728 - 3808
 3326 - 3575
 3842 - 4079
 4198 - 5611
 5516 - 8091

2. A DNA fragment encoding a protein, which DNA fragment is derived from the genomic DNA of HPV-33 and selected from the group of fragments extending between the nucleotide extremities defined hereafter in relation to the nucleotide-numbering in figs. 1a and 1b respectively :

109 - 556
 573 - 864
 879 - 2811
 2749 - 3808
 3326 - 3575
 3842 - 4079
 4210 - 5611
 5594 - 7091

3. The fragment of claims 1 or 2 which is a cloned fragment.

4. A DNA recombinant, replicable in a cell host, particularly bacteria such as E. coli, which contains an insert containing any of the fragments defined in claims 1 to 3 fused with a DNA foreign thereto.

5. The DNA recombinant of claim 4 which is a vector, wherein said insert is replicable with said vector.

6. The purified peptides obtained from host cells transformed by the vector of claim 5 and in which said insert has been expressed.

5 7. The antibodies against the peptides of the purified peptides of claim 6.

8. A DNA-hybridization probe for the detection of viral DNA characterized in that it contains a fragment of any of claims 1 to 3 or is formed of the DNA recombinant
10 of claims 4 or 5, or by a part thereof.

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